

REMARKS

This Preliminary Amendment is being filed concurrently with a Request for Continued Examination.

The Applicant wishes to express his gratitude for the courtesies extended by the Examiner and his supervisor in the Interview conducted on March 4, 2004. Consistent with the discussions and helpful suggestions in the Interview, the foregoing amendments and following remarks are directed to refining the claims' recitation of the present invention.

Specifically, the Applicant has canceled claims 1-6, and amended independent claims 7, 17, 21 and 24 to incorporate the limitations of respective dependent claims and to add limitations regarding features of the present invention disclosed in the written description. In addition, conforming amendments and amendments to correct typographic errors have been made to claims 10 and 28, and claims 9, 23, 25-27 and 38 have been canceled without prejudice to the subject matter contained therein.

Rejections under 35 U.S.C. § 103(a) include:

- Claims 1-2, 17-18, 21, 28-33 and 36-38 as unpatentable over U.S. Patent No. 5,825,759 to Liu ("Liu") in view of U.S. Patent No. 6,363,323 to Jones ("Jones") or U.S. Patent No. 5,493,291 to Bruggemann ("Bruggemann"), and further in view of U.S. Patent No. 5,530,917 to Andersson, *et al.* ("Andersson");
- Claims 3-11 and 14 as unpatentable over Liu, Jones and Bruggemann in further view of U.S. Patent No. 6,282,412 to Lyons ("Lyons");

- Claims 12-14 as unpatentable over Liu, Jones, Bruggemann and Lyons in further view of U.S. Patent No. 6,473,602 to Bottomley (“Bottomley”);
- Claims 15 and 19 as unpatentable over Liu, Jones and Bruggemann in further view of U.S. Patent No. 6,125,278 to Wieczorek, *et al.* (“Wieczorek”);
- Claims 16 and 20 as unpatentable over Liu, Jones and Bruggemann in further view of IEEE Paper The Proper Statistical Nature of Measuring and Estimating, Dr. Wm. Lee, Airtouch Communications 1999 (“Lee Paper”);
- Claims 22-23 as unpatentable over Liu, Jones, Bruggemann and Andersson in further view of U.S. Patent No. 6,185,413 to Mueller, *et al.* (“Mueller”);
- Claims 24-27 as unpatentable over Liu in view of Mueller and Wieczorek;
- Claim 34 as unpatentable over Liu, Jones, Bruggemann and Andersson in further view of Bottomley; and
- Claim 35 as unpatentable over Liu, Jones, Bruggemann and Andersson in further view of U.S. Patent No. 6,505,046 to Baker (“Baker”).

The following addresses each of the pending rejections.

1. Rejection of Claims 3 and 7 and Their Dependent Claims.

The Applicant respectfully traverses the pending rejections under § 103(a) of claim 7 and its dependent claims 8-16 as unpatentable over the various recited combinations of Liu, Jones, Bruggemann, Lyons, Bottomley, Wieczorek and the IEEE Paper, on the grounds that these references do not teach or suggest all the features of the present invention as recited in amended claim 7.

Amended claim 7 and its dependent claims 8 and 10-16 now recite a method of selecting which of a plurality of wireless communication options will be used, wherein, *inter alia*, the mobile communications device determines where it is located on a route, the coverage area boundary locations on the streets along the route (and only the boundary locations on the route) are stored, and the determination of whether to switch from one wireless communication option to another is based on *both* the wireless communication options available once the boundary is crossed *and* the options that will be available *further along the route*. The Applicant respectfully submits that no combination of the cited references suggests the features now recited in amended claim 7.

In view of the foregoing amendments and remarks, the Applicant respectfully requests reconsideration and withdrawal of the pending § 103(a) rejections of claims 7-8 and 10-16.

2. Rejection of Claims 17-20.

The Applicant respectfully traverses the pending rejections under § 103(a) of 17 and its dependent claims 18-20, on the grounds that the cited references do not teach or suggest all the features of the present invention.

The pending Office Action maintains that Liu teaches a method of selecting which of a plurality of wireless communication options will be used, that Jones teaches tracking a vehicle on a schedule/route, and that Bruggemann teaches use of transponders transmitting street names, suitable for navigation in which a predetermined route is stored and compared to the transmitted route information.

Claim 17, as amended, recites obtaining updated coverage information *at the mobile communication device*, wherein the coverage information is coverage boundary locations *on the streets of the route*. While Bruggemann may teach that it is possible for a vehicle navigation system to ascertain its location from transponders located in the road, there is nothing in this reference, Liu or Jones which begins to suggest the storage and/or updating of coverage boundary location information, at the mobile communication device, in the form of boundary locations on the streets of a predetermined route. Accordingly, the Applicant respectfully submits that the invention recited in amended claim 17 and its dependent claims 18-20 is patentable over the cited references. Reconsideration and withdrawal of the § 103(a) rejections of these claims is respectfully requested.

3. Rejection of Claims 21-22.

The Applicant respectfully traverses the pending rejections under § 103(a) of claim 21 (amended to incorporate the limitations of claims 23 and 2) and its dependent claim 22, on the grounds that the cited references do not teach or suggest all the features of the present invention.

As in amended claim 7, amended claim 21 recites that the determination of whether to switch from one wireless communication option to another is based on *both* the wireless communication options available once the boundary is crossed *and* the options that will be available *further along the route*. The Applicant respectfully submits that no combination of the cited references suggests this feature, or claim 21's consideration of cost and performance both in

the next coverage area and subsequent coverage areas along the route in is coverage selection determination. Reconsideration and withdrawal of the § 103(a) rejections of these claims is respectfully requested.

4. Rejection of Claim 24.

The Applicant respectfully traverses the pending rejections under § 103(a) of claim 24, on the grounds that the cited references do not teach or suggest all the features of the present invention.

Claim 24, as amended, recites a method for providing a uniform content access layer application program interface for application programs that use mobile communication, wherein, *inter alia*, a database accessible by the application program is provided “at the mobile communication device,” and there is stored in the database information concerning any wireless communication options that are available for use by the mobile communication device *as it traverses a route*. In other words, the present invention is directed to providing an API which functions *based on knowledge, placed with the mobile device, regarding the resources available along a route* – a feature that is not either taught or suggested by the cited references. At most, Liu teaches hand-off functions and Wieczorek teaches load optimization – neither reference appears to suggest any such function from the perspective of the *mobile device* selecting a communication option, or doing so along a predetermined path. The invention recited in amended claim 24 is thus not taught or suggested by Liu, Mueller and/or Wieczorek. Reconsideration and withdrawal of the § 103(a) rejection of this claim is respectfully requested.

5. Rejection of Claims 28-29 and Their Dependent Claims 30-37.

The Applicant respectfully traverses the pending rejections under § 103(a) of claims 28 and 29, and their respective dependent claims 30-37, on the grounds that the cited references do not teach or suggest all the features of the present invention.

Claim 28, as amended, recites a method for wireless transmission of data in which, *inter alia*, route information and coverage area information along the route are stored in a mobile data communications device, a determination is made “at the mobile device” of which base station along the route should be used to transfer data to the mobile communication device, and having the desired information forwarded to the selected base station for transfer during the time the mobile device is within range of the selected based station. Claim 29 similarly provides for *the mobile device* in a vehicle to initiate a request to a wireless network to place information at a selected “info-fueling station” and having requested information transferred to the vehicle during the time the vehicle is in range of info-fueling station. *See, e.g.*, Application at 21:17-22:9 (request from mobile device designating base station to which information is to be forwarded).

The Applicant respectfully submits there is no teaching or suggestion in the cited references of claims 28-29’s *mobile communication device-based* predictive data requesting and pre-positioned delivery method. As previously noted, Liu teaches an approach for a *service provider* to make a prediction as to where a mobile user may travel, and to make resources (such as user-related

information) available at that location. Liu does not teach or suggest anything regarding the *mobile device's* instructing a service provider to provide information to a mobile-device-selected base station based on the mobile device's knowledge of the route to be covered and its evaluation of the optimal location for transfer of the desired information to the vehicle. The mere fact that connectivity to the Internet can be established using base stations along a highway (*e.g.*, the IEEE 802.11 referred to in the Office Action) does not *a priori* teach or suggest the present invention's method for its mobile device to determine, based on a planned route, which particular base station should receive requested information for transfer when the vehicle passes within range.

For the foregoing reasons, the Applicant respectfully submits that invention recited in amended claims 28 and 29 and their respective dependent claims 30-37 is not taught or suggested the cited references. Accordingly, reconsideration and withdrawal of the § 103(a) rejection of claims 29-37 is respectfully requested.

CONCLUSION

In view of the foregoing amendments and remarks, the Applicant respectfully submits that claims 7-8, 10-22, 24 and 28-37 are allowable over the cited references. Early and favorable consideration and issuance of a Notice of Allowance for these claims is respectfully requested.

If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket #1844/50414MI).

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